

PERMITTING INFORMATION DATA STANDARD

Standard No.: EX000021.2

January 6, 2006

Approved on January 6, 2006 by the
Exchange Network Leadership Council
for use on the Environmental
Information Exchange Network

Approved on January 6, 2006 by the
Chief Information Officer of the
U. S. Environmental Protection Agency
for use within U.S. EPA

This consensus standard was developed in collaboration by State, Tribal, and U. S. EPA representatives under the guidance of the Exchange Network Leadership Council and its predecessor organization, the Environmental Data Standards Council.

Foreword

The Environmental Data Standards Council (EDSC) identifies, prioritizes, and pursues the creation of data standards for those areas where information exchange standards will provide the most value in achieving environmental results. The Council involves state and federal agencies, tribes and tribal nations in the development of the standards and then provides the draft materials for general review. Business groups, non-governmental organizations, and other interested parties may then provide input and comment for Council consideration and standard finalization. Standards are available at <http://www.epa.gov/datastandards>.

1.0 INTRODUCTION

The Permitting Information Data Standard provides information regarding the permit or permitting process. This standard specifies the key data groupings necessary for the consistent identification of information pertaining to permits of interest to environmental information exchange partners. This data standard provides a minimum set of data, which needs to be reported for permitting information such as permit name, number, type, organization/facility name and affiliation type.

1.1 Scope

The purpose of this data standard is to ensure the uniformity and comparability of information resulting from the identification of permits in the collection, analysis, and exchange of environmental permit data.

1.2 Revision History

Date	Version	Description
December 20, 2001	1-19942:1	Initial adoption by the Environmental Data Standards Council.
July 29, 2003	1-189246:1	Included the addition of new data elements
February 1, 2005	1-189246:2	Revised format
January 6, 2006	EX000023.2	Assignment of a new data standard number.

1.3 References to Other Data Standards

This data standard relies on other data standards to make it complete and to provide the necessary support. As such, users should reference the normative standards, listed below, and consider them integral to the Permitting Information Data Standard.

- Biological Taxonomy [EX000018.2] Data Standard
- Chemical Identification [EX000016.2] Data Standard
- Contact Information [EX000019.2] Data Standard
- Representation of Date and Time [EX000013.1] Data Standard
- Facility Site Identification [EX000020.2] Data Standard
- Latitude/Longitude [EX000017.2] Data Standard
- ESAR Overview [EX000001.1] Data Standard
- ESAR Project [EX000002.1] Data Standard
- ESAR Monitoring Location [EX000003.1] Data Standard
- ESAR Field Activity [EX000004.1] Data Standard
- ESAR Analysis and Results [EX000005.1] Data Standard
- Measure [EX000010.1] Data Standard
- Method [EX000011.1] Data Standard
- Enforcement/Compliance [1-85727:1] Data Standard
- Quality Assurance/Quality Control [EX000012.1] Data Standard

1.4 Terms and Definitions

For the purposes of this document, the following terms and definitions apply.

Term	Definition
Permit	<p>A permit, authorization, license, certification, or equivalent used to implement the requirements of an environmental regulation.</p> <p>Example 1: A permit is issued to an individual or organization and typically specifies pollutant discharge limits or operating procedures.</p> <p>Example 2: A permit may be uniquely identified by the combination of three data elements: (1) Permit Identifier, (2) Name of Issuing Organization, and (3) Permit Type.</p>

1.5 Implementation

Users are encouraged to use the XML registry located on the Exchange Network Web site (<http://www.exchangenetwork.net>) to download schema components for the construction of XML schema flows.

1.6 Document Structure

The structure of this document is briefly described below:

- a. Section 2.0 Permitting Information Diagram, illustrates the principal data groupings contained within this standard.
- b. Section 3.0 Permitting Information Data Standards Table, provides detailed information on the high level, intermediate and elemental permitting information data groupings. Where applicable, for each level of this data standard a definition, XML tag, note(s), example list of values and format are provided. The format column may include the number of characters for the associated data element, where "A" specifies alphanumeric, "N" designates numeric, and "Graphic" designates a diagram or other graphic related binary object.
- c. Data Element Numbering: For purposes of clarity and to enhance understanding of data grouping hierarchy and relationships, each data group is numerically classified from the primary to the elemental level.
- d. Code and Identifier Metadata: Metadata, defined here as data about data or data elements, that includes their descriptions and/or any needed context setting information required to identify the origin, conditions of use, interpretation, or understanding the information being exchanged or transferred. (Adapted from ISO/IEC 2382-17:1999 Information Technology Vocabulary—Part 17: Databases 17.06.05 metadata). Based on the business need, additional metadata may be required to sufficiently describe an identifier or a code. A note regarding this additional metadata is included in the notes column for identifier and code elements. Additional metadata for identifiers may include:

- Identifier Context, which identifies the source or data system that created or defined the identifier

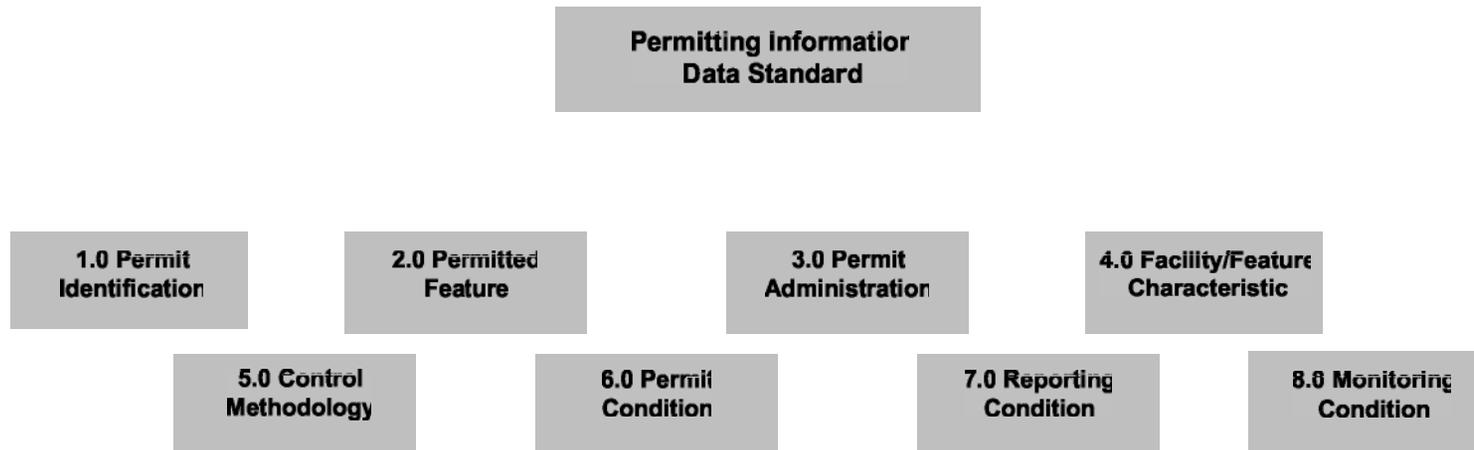
Additional metadata for codes may include:

- Code List Identifier, which is a standardized reference to the context or source of the set of codes
- Code List Version Identifier, which identifies the particular version of the set of codes
- Code List Version Agency Identifier, which identifies the agency responsible for maintaining the set of codes
- Code List Name, which describes the corresponding name for which the code represents

- e. Appendix A Permitting Information Data Structure Diagram illustrates the hierarchical classification of the permitting information data standard. This diagram enables business and technical users of this standard to quickly understand its general content and complexity. Appendix B, lists the references for Permitting Information Data Standard.

2.0 PERMITTING INFORMATION DIAGRAM

The figure below illustrates the major data groups associated with the Permitting Information Data Standard.



3.0 PERMITTING INFORMATION DATA STANDARDS TABLE

1.0 Permit Identification

Definition: Identification information about the permit and the organization responsible for issuing or granting the permit.

Relationship:

- A permit may be related to a facility (Facility Site Identification [EX000020.2] Data Standard).
- A permittee may be associated with Facility Site Name, Facility Owner/Operator (a permissible value for Affiliation Type), Facility Registry Identifier, and State Facility Identifier.
- A permit name may be associated with Environmental Interest Type.
- A facility may have one or more permits.
- A permit may address one or more regulated substances (Chemical Identification [EX000016.2] and/or Biological Taxonomy [EX000018.2] Data Standards).
- A permit may be related to another permit (e.g., an individually permitted facility may be related to an overarching General Permit).
- A permit may have one or more permitted features or processes.
- A permit may be associated with one or more data elements of administrative information (multiple dates may create history).
- A permit may be associated with one or more permitting contacts.
- A number of contact related data elements exist in the Contact Information [EX000019.2] Data Standard and Facility Site Identification [EX000020.2] Data Standard, which should be used, as needed, to identify entities and their affiliation. These include

- ✓ Permittee,
- ✓ Organization Formal Name,
- ✓ Affiliation Type,
- ✓ Permitted Entity Contact Full Name, and
- ✓ Permitted Entity Contact Information (e.g., mailing address, phone number, etc.)

Notes: None

XML Tag: PermitIdentification

Name	Definition	Notes	Format	XML Tag
1.1 Permit Identifier	The alphanumeric identifier assigned to the permit by a permit issuing/granting organization to identify a permit or permit application.	Example List of Values: 51432 Based on the business need, additional metadata may be required to sufficiently describe an identifier. This additional metadata is described in section 1.6.d.	A	PermitIdentifier
1.2 Permit Name	The name assigned to the permit by a permit issuing/granting organization to identify a permit or permit application.	Example List of Values: Dupont Chamberworks RCRA Treatment Permit This data element may be associated to Environmental Interest Type in the U.S. EPA Facility Registry System.	A	PermitName
1.3 Other Permit Identifier	An alphanumeric identifier assigned to the permit.	Based on the business need, additional metadata may be required to sufficiently describe an identifier. This additional metadata is described in section 1.6.d.	A	OtherPermitIdentifier
1.4 Program Name	The name of the program/jurisdictional authority under which a permit is issued or granted.	Example List of Values: Air Quality Water Quality/NPDES Hazardous Waste/RCRA Underground Injection Control (UIC) Solid Waste Mining	A	ProgramName
1.5 Permit Type Code	The code for the type of permit issued or granted to a regulated entity.	Based on the business need, additional metadata may be required to sufficiently describe a code. This additional metadata is listed in Section 1.6.d.	A	PermitTypeCode

2.0 Permitted Feature

Definition: Information about the permitted feature of a permit. A permitted feature is a unit, physical structure, feature, or process described in a permit.

Relationships:

- ✓ A permitted feature may be associated with one or more data elements of administrative information.
- ✓ A permitted feature identifier may be associated with one of more permitted feature types.
- ✓ A permitted feature may address one or more regulated substances (see **Chemical Identification [EX000016.2] Data Standard and/or Biological Taxonomy [EX000018.2] Data Standards** for proper reference).

Notes: None

XML Tags: PermittedFeature

Name	Definition	Notes	Format	XML Tag
Permitted Feature Identifier	The alphanumeric identifier or name assigned by a permit issuing organization to identify a permitted unit, feature, or process.	<p>Example List of Values: Smith Furnace AV.</p> <p><i>Note:</i> This data element may be used multiple times to describe multiple features. Each feature identifier/ name should be associated to at least one feature type. Based on the business need, additional metadata may be required to sufficiently describe an identifier. This additional metadata is described in section 1.6.d.</p>	A	PermittedFeatureIdentifier

Name	Definition	Notes	Format	XML Tag
2.2 Permitted Feature Type Name	The type of permitted unit, feature, or process represented by an identifier.	Example List of Values: External outfall Internal outfall Lagoon Land application site Incinerator Stack Pumping station Monitoring well Perc pond Landfill Surface impoundment Waste pile Tank Container Boiler and industrial furnace Corrective Action Management Units Solid Waste Management Units	A	PermittedFeatureTypeName
2.3 Permitted Feature Description Text	The text that describes the feature that is permitted.		A	PermittedFeatureDescriptionText
2.4 Permitted Feature Operating Status Name	The name of the category describing the operating status of a permitted unit.	Example List of Values: Proposed Under construction Constructed, but not yet active Active/Operating Inactive Clean/Closed Closed in place Not constructed Operating Operating, but not discharging Not operating Seasonal shut down Temporary shut down	A	PermittedFeatureOperatingStatusName

Name	Definition	Notes	Format	XML Tag
2.5 Permitted Feature Start Date	The calendar date that the operating status of a permitted feature takes effect.	Refer to the Representation of Date and Time [EX000013.1] Data Standard.	D	PermittedFeatureStartDate
2.6 Permitted Feature End Date	The calendar date that the operating status of a permitted feature is no longer in effect.	Refer to the Representation of Date and Time [EX000013.1] Data Standard.	D	PermittedFeatureEndDate

3.0 Permit Administration

Definition: Administrative information about the permit.
 Relationships: None.
 Notes: None.
 XML Tag: PermitAdministration

Name	Definition	Notes	Format	XML Tag
3.1 Permit/Permitted Feature Administrative or Legal Status Text	The administrative or legal status of a permit or permitted feature.	Example List of Values: Pending Appealed Denied Active Inactive Expired Extended Withdrawn Revoked Not required	A	PermitStatusText
3.2 Permit Application Completion Date	The calendar date that a permit application was deemed to be complete.	Refer to the Representation of Date and Time [EX000013.1] Data Standard.	D	PermitApplicationCompletionDate
3.3 Permit Issue Date	The calendar date that a permit was issued.	Refer to the Representation of Date and Time [EX000013.1] Data Standard.	D	PermitIssueDate
3.4 Permit Effective Date	The calendar date that a permit becomes effective.	Refer to the Representation of Date and Time [EX000013.1] Data Standard.	D	PermitEffectiveDate

Name	Definition	Notes	Format	XML Tag
3.5 Permit Expiration Date	The calendar date that a permit expires.	Refer to the Representation of Date and Time [EX000013.1] Data Standard.	D	PermitExpirationDate
3.6 Permit Revocation Date	The calendar date that a permit will be or was revoked.	Refer to the Representation of Date and Time [EX000013.1] Data Standard.	D	PermitRevocationDate
3.7 Permit Termination Date	The calendar date that a permit will be or was terminated or surrendered.	Refer to the Representation of Date and Time [EX000013.1] Data Standard.	D	PermitTerminationDate
3.8 Permit Event Type Text	The text describing an event associated with a permit or permit application process.	<i>Note:</i> 3.8 and 3.9 are generally used together. There may be multiple instances of these elements.	A	PermitEventTypeText
3.9 Permit Event Date	The date of an event associated with a permit or permit application process.	Refer to the Representation of Date and Time [EX000013.1] Data Standard. <i>Note:</i> 3.8 and 3.9 are generally used together. There may be multiple instances of these elements.	D	PermitEventDate

4.0 Facility/Feature Characteristic

Definition: The description of the size, scope, and complexity of a specific feature or facility.

Relationships: A facility/feature characteristic may be associated with a Permit Identifier or a Permitted Feature Identifier.

Notes: The data elements in this group can be used at the facility level as well as the feature level. Collectively, these data elements can be used to describe the quantity that a permitted facility or feature (feature may be a unit or process) is designed to, permitted to, or can actually manage or produce. It also can characterize the flow, production amount, or other specifications about the facilities or feature's designed or actual characteristics or functions.

XML Tag: FacilityFeatureCharacteristic

Name	Definition	Notes	Format	XML Tag
4.1 Facility/Feature Characteristic Name	The descriptive name of the item that the facility/feature is designed to or actually accommodates, or produces.	Example List of Values: Sewage Pollutant Chemical Biological Product Nylon Heat input	A	FacilityFeatureCharacteristicName
4.2 Facility/Feature Characteristic Text	The description of the capability or function that the facility/feature is designed to or actually accommodates, or produces.	Example List of Values: Removal of pollutants from municipal waste water.	A	FacilityFeatureCharacteristicText
4.3 Facility/Feature Characteristic Measure Name	The name that describes what the feature characteristic represents.	Example List of Values: Potential flow Actual flow Design capacity Production amount Actual capacity	A	FacilityFeatureCharacteristicMeasureName
4.4 Facility/Feature Characteristic Statistical Basis Name	The name of the statistical basis describing how the feature characteristic measure value was derived.	Example List of Values: Maximum Average	A	FacilityFeatureCharacteristicStatisticalBasisName
4.5 Facility/Feature Characteristic Measure	The value that quantifies the feature characteristic.	Refer to Measure [EX000010.1] Data Standard . The following items are needed: Measure Value Measure Unit Code Measure Qualifier Code	A	FacilityFeatureCharacteristicMeasure

5.0 Control Methodology

Definition: A process and/or tools to manage storage, disposal, treatment, and other handling protocols designed for and/or used. A control

Relationships: methodology may be related to one or more facilities, features, or entities.

Notes: None.ControlMethodology

XML Tag:

Name	Definition	Notes	Format	XML Tag
5.1 Methodology Type Text	The type of process and/or tool designed or used to manage storage, disposal, treatment, and other handling protocols.	Example List of Values: Incineration Disposal	A	MethodologyTypeText
5.2 Methodology Description Text	The text that describes the process and/or tools that manage storage, disposal, treatment, and other handling protocols designed for and/or used.	<i>Note:</i> This field allows the user to provide extensive detail to describe the methodology used beyond that provided by Methodology Type. Example List of Values: Equipment manufacturer Make Model Location description	A	MethodologyDescriptionText

6.0 Permit Condition

Definition: The requirement applied to the facility, entity, or feature. Conditions could be limit/numeric, schedule/date, or descriptive requirements.

Relationships:

- A permit condition is associated with a Permit Identifier.
- Multiple permit conditions may be associated with a permit.
- A permit condition may be associated with one or more facilities, entities, or features.
- Multiple permit conditions may be placed on a facility, entity, or feature.

Notes: Reference the **ESAR Analysis and Results [EX000005.1] Data Standard** and the **Method [EX0000011.1] Data Standard**.

XML Tag: PermitCondition

Name	Definition	Notes	Format	XML Tag
6.1 Condition Identifier	The reference to a section of a permit that identifies the condition within a specific permit.	Based on the business need, additional metadata may be required to sufficiently describe an identifier. This additional metadata is described in section 1.6.d.	A	ConditionIdentifier
6.2 Basis of Condition	The regulatory or technical framework used to define the requirement.	Example List of Values: Statute name Citation Water-quality guidelines <i>Note:</i> Source: Enforcement/Compliance [185727:1] Data Standard: Federal Statute Violated	A	ConditionBasisText
6.3 Condition Status Name	The name of the category describing the status of the condition.	Example List of Values: Initial Modified Revoked	A	ConditionStatusName
6.4 Condition Start Date	The date on which a condition begins being in effect.	Refer to the Representation of Date and Time [EX000013.1] Data Standard .	D	ConditionStartDate

Name	Definition	Notes	Format	XML Tag
6.5 Condition End Date	The date on which a condition ends being in effect.	Refer to the Representation of Date and Time [EX000013.1] Data Standard.	D	ConditionEndDate
6.6 Condition Description Text	The language that explains the requirement placed on the responsible party.	Example List of Values: "Ensure fence surrounds storm water pond."	A	ConditionDescriptionText
6.7 Condition Trigger Text	The text that describes an event or circumstance that activates a requirement.	Example List of Values: Seasonal limit Ozone exceedance	A	ConditionTriggerText
6.8 Numeric Condition Statistical Basis Name	The name of the statistical basis specified in a limit/numeric condition.	Example List of Values: Average Maximum	A	NumericConditionStatisticalBasisName
6.9 Condition Quantity Measure	The value that represents the limitation being placed on a parameter for a feature.	Reference: Measure [EX000010.1] Data Standard and QA/QC [EX000012.1] Data Standard. The following items are needed: Measure Value Measure Unit Code Measure Qualifier Code	G	ConditionQuantityMeasure

7.0 Reporting Condition

Definition: Administrative information associated with submission or reporting requirements.
 Relationships: A reporting condition may be associated with one or more permit conditions.
 Notes: None.
 XML Tag: ReportingCondition

Name	Definition	Notes	Format	XML Tag
7.1 Report Recipient Name	The name of the entity or entities directed by the permit or regulations to receive the report.	Source: Facility Site [EX000020.2] Data Standard & Contact [EX000019.2] Data Standard Organization Formal Name	A	ReportRecipientName
7.2 Reporting Frequency Text	The frequency with which the report is required to be submitted to the report recipient.	Example List of Values: Annually Quarterly Monthly Daily	A	ReportingFrequencyText
7.3 Report Due Date	The date that the report is due to the report recipient.	Refer to the Representation of Date and Time [EX000013.1] Data Standard.	D	ReportDueDate
7.4 Report Received Date	The actual date the report was received by the report recipient.	Refer to the Representation of Date and Time [EX000013.1] Data Standard.	D	ReportReceivedDate
7.5 Report Identifier	The unique tracking number or name assigned by a system or program that identifies the report.	Example List of Values: 4 th Quarterly Report 20030714A Based on the business need, additional metadata may be required to sufficiently describe an identifier. This additional metadata is described in section 1.6.d.	A	ReportIdentifier

8.0 Monitoring Condition

Definition: Administrative information that describes the monitoring requirements. Relationships:
A monitoring condition may be associated with one or more permit conditions.

Notes: This data group is intended to capture monitoring activities required by a permit such as a description of the monitoring site, its location, monitoring frequency, the method used to collect a sample, or the reference number of the analytical method used. Where they exist, data elements from other final data standards are referenced for use as needed.

XML Tag: MonitoringCondition

The **Latitude/Longitude [EX000017.2] Data Standard**, may be used to identify the specific geographical representation of the monitoring location.

The **Method [EX000011.1] Data Standard** may be used to identify the method used to collect the sample as prescribed by a permit.

Name	Definition	Notes	Format	XML Tag
8.1 Monitoring Site Description	Text that describes the monitoring site with respect to a feature.	Example List of Values: Stack 12 Scrubber A2 Manhole Downstream from Discharge pipe	A	MonitoringSiteDescription
8.2 Monitoring Frequency Text	The required frequency with which monitoring is to be conducted at the site or location.	Example List of Values: Daily Hourly Monthly Quarterly Semi-annually Yearly Bi-annual Tri-annual No reporting requirements Source: AIRS/AFS: Reporting Requirements to Region	A	MonitoringFrequencyText

Appendix A Permitting Information Data Structure Diagram

Permitting Information Data Standard

1.0 Permit Identification

1.1 Permit Identifier 1.2
Permit Name
1.3 Other Permit Identifier 1.4
Program Name 1.5 Permit
Type Code

2.0 Permitted Feature

2.1 Permitted Feature Identifier 2.2
Permitted Feature Type Name 2.3
Permitted Feature Description
Text
2.4 Permitted Feature Operating
Status Name
2.5 Permitted Feature Start Date
2.6 Permitted Feature End Date

3.0 Permit Administration

3.1 Permit/Permitted Feature
Administrative or Legal Status
Text
3.2 Permit Application Completion
Date
3.3 Permit Issue Date 3.4
Permit Effective Date 3.5

Permit Expiration Date 3.6
Permit Revocation Date 3.7
Permit Termination Date 3.8
Permit Event Type Text 3.9
Permit Event Date

4.0 Facility/Feature Characteristic

4.1 Facility/Feature Characteristic
Name
4.2 Facility/Feature Characteristic
Text
4.3 Facility/Feature Characteristic
Measure Name
4.4 Facility/Feature Characteristic
Statistical Basis Name
4.5 Facility/Feature Characteristic
Measure

5.0 Control Methodology

5.1 Methodology Type Text
5.2 Methodology Description Text

7.0 Reporting Condition

7.1 Report Recipient Name 7.2
Reporting Frequency Text 7.3
Report Due Date 7.4 Report
Received Date 7.5 Report Identifier

8.0 Monitoring Condition

8.1 Monitoring Site Description 8.2
Monitoring Frequency Text

6.0 Permit Condition

6.1 Condition Identifier
6.2 Basis of Condition
6.3 Condition Status Name
6.4 Condition Start Date 6.5
Condition End Date
6.6 Condition Description Text
6.7 Condition Trigger Text
6.8 Numeric Condition Statistical Basis
Name
6.9 Condition Quantity Measure

Appendix B References

1. *ISO/IEC 2382-17:1999 Information Technology Vocabulary—Part 17: Databases 17.06.05.*